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| APPLICATION NO.   | FILING DATE       | FIRST NAMED INVENTOR    | ATTORNEY DOCKET NO.        | CONFIRMATION NO. |  |
|---|-------------------|-------------------------|----------------------------|------------------|--|
| 10/620,523  | 07/16/2003        | Yasuhiro Ishibashi      | P 0303492<br>3KG034975USAA |                  |  |
| 27496   | 7590 . 04/19/2005 |                         | EXAM                       | INER             |  |
| PILLSBURY WINTHROP SHAW PITTMAN LLP<br>725 S. FIGUEROA STREET |                   |                         | PARK, I                    | PARK, ILWOO      |  |
| SUITE 2800  |                   | ART UNIT                | PAPER NUMBER               |                  |  |
| LOS ANGELES, CA 90017   |                   |                         | 2182                       |                  |  |
| •   |                   | DATE MAILED: 04/19/2005 |                            |                  |  |

Please find below and/or attached an Office communication concerning this application or proceeding.

|   | Application No.      | Applicant(s)                |  |  |  |
|---|----------------------|-----------------------------|--|--|--|
|   | 10/620,523           | ISHIBASHI, YASUHIRO         |  |  |  |
| Office Action Summary   | Examiner             | Art Unit                    |  |  |  |
|   | Ilwoo Park           | 2182                        |  |  |  |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply  |                      |                             |  |  |  |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). |                      |                             |  |  |  |
| Status  |                      |                             |  |  |  |
| 1) Responsive to communication(s) filed on 16 July 2003.  |                      |                             |  |  |  |
| •   | <del></del>          |                             |  |  |  |
| 3) Since this application is in condition for allowance except for formal matters, prosecution as to the ments is   |                      |                             |  |  |  |
| closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.   |                      |                             |  |  |  |
| Disposition of Claims   |                      |                             |  |  |  |
| 4)⊠ Claim(s) <u>1-24</u> is/are pending in the application.   |                      |                             |  |  |  |
| 4a) Of the above claim(s) is/are withdrawn from consideration.  |                      |                             |  |  |  |
| 5)⊠ Claim(s) <u>21</u> is/are allowed.  |                      |                             |  |  |  |
| 6)⊠ Claim(s) <u>1-3,5,8-11,13,16-20 and 22-24</u> is/are rejected.  |                      |                             |  |  |  |
| 7) Claim(s) <u>4,6,7,12,14 and 15</u> is/are objected to.   |                      |                             |  |  |  |
| 8) Claim(s) are subject to restriction and/or election requirement.   |                      |                             |  |  |  |
| Application Papers  |                      |                             |  |  |  |
| 9) The specification is objected to by the Examiner.  |                      |                             |  |  |  |
| 10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  |                      |                             |  |  |  |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).   |                      |                             |  |  |  |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  |                      |                             |  |  |  |
| 11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.   |                      |                             |  |  |  |
| Priority under 35 U.S.C. § 119  |                      |                             |  |  |  |
| 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of:  |                      |                             |  |  |  |
| 1. Certified copies of the priority documents have been received.   |                      |                             |  |  |  |
| 2. Certified copies of the priority documents have been received in Application No  |                      |                             |  |  |  |
| 3. Copies of the certified copies of the priority documents have been received in this National Stage   |                      |                             |  |  |  |
| application from the International Bureau (PCT Rule 17.2(a)).   |                      |                             |  |  |  |
| * See the attached detailed Office action for a list of the certified copies not received.  |                      |                             |  |  |  |
|   |                      |                             |  |  |  |
| Attachmont/cl   |                      |                             |  |  |  |
| Attachment(s)  1) Notice of References Cited (PTO-892)  | 4) Interview Summary | (PTO-413)                   |  |  |  |
| 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Da  | te                          |  |  |  |
| 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 7/16/03.   | 5)                   | atent Application (PTO-152) |  |  |  |
| S. Patent and Trademark Office  TOU 326 (Poy 1 04)  |                      |                             |  |  |  |



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### **DETAILED ACTION**

## **Priority**

- 1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.
- 2. Claims 1-24 are presented for examination.

# Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claims 1-3, 5, 8-11, 13, 16-20, and 22-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takahashi, US patent application publication No. 2002/0141739 A1 in view of Higashida et al., US patent No. 6,862,401 B1.

As to claims 1 and 22, Takahashi teaches an information processing apparatus to record streaming data in a storage device [HDD 28 in fig. 1], comprising:

a first bus [CPU bus 137 in fig. 5] to transfer various data;

a first processor [CPU 24, 124: paragraphs 0093, 0098] that manages, as a file, data recorded the storage device;

a receiver [e.g., tuner 11 in fig. 1] that receives externally supplied streaming data;

a second bus [e.g., signal line between encoder 114 and controller 125 in fig. 5] to transfer the streaming data received by the receiver;

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a third bus [e.g., signal line between HDD 128 and controller 125 in fig. 5] electrically connected to the storage device; and

a second processor [controller 25, 125] electrically connected to the first bus, the second bus, and the third bus, and storing [fig. 8] in the storage device via the third bus the streaming data input from the receiver via the second bus in response to an access request input [paragraph 0079] from the first processor via the first bus.

Even though Takahashi teaches the file management information input is somehow stored in the storage device [paragraph 0095] and the first processor controls the entire information processing apparatus [paragraph 0037], Takahashi does not expressly disclose the file management information input is from the first processor. Higashida et al teach an information processing apparatus having a first processor [CPU 11: col. 5, lines 45-60] that manages, as a file, data recorded a storage device [hard disk 8 in fig. 2] and a second processor [recording/reproducing control means 7 in fig. 2] storing in the storage device streaming data input [col. 6, lines 34-55] and file management information input [col. 5, lines 54-67] from the first processor, in response to an access request input from the first processor via the first line. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Takahashi and Higashida et al because they both teach a storage device storing a file management information input with streaming data input as a file and the Higashida et al's teaching of the first processor providing a file management information input to be stored in the storage device would increase

manageability of a file in addition to the first processor reading/displaying a file management information from the storage device [Takahashi: paragraphs 0096, 0098].

- 5. As to claims 2, 10, and 18, Takahashi teaches the streaming data is broadcast content data, and the receiver includes a tuner unit that receives the broadcast content data [fig. 1].
- 6. As to claims 3 and 11, Takahashi teaches the second processor includes a buffer memory [register 125j and SDRAM 126 in fig. 5] assigned within a memory address space accessible [paragraph 0077] by the first processor and temporarily stores [paragraph 0040] streaming data input from the receiver via the second bus, and the first processor sends the second processor, via the first bus, an access request [paragraphs 0079, 0080] for instructing the second processor write the data stored in the buffer memory into the storage device.
- 7. As to claim 5, Higashida et al teach the streaming data received by a receiver includes compression-encoded video data [col. 4, lines 19-24], and

the second processor includes:

a decoder that decodes [col. 6, lines 34-65] the streaming data stored in the storage device, in accordance with a decode request sent from the first processor via a first bus; and

a video output interface that outputs [col. 7, lines 52-57] decoded streaming data to an external video monitor [monitor 4] as video data, in accordance with a reproduction request sent from the first processor the first bus.

- 8. As to claims 8 and 16, Takahashi teaches a control bus to connect the receiver and the second processor, wherein the receiver is a tuner unit that receives broadcast content data composed of streaming data and the second processor transmits to the receiver via the control bus, control information indicative of to which channel broadcast program data to be received belongs, in accordance with a channel elect request input fro the first processor via the first bus [implicit to a record reservation command of a remote controller interface 125e: paragraphs 0037, 0049, 0078].
- 9. As to claims 9 and 23, Takahashi teaches an information processing apparatus to record streaming data in a disk storage device [HDD 28 in fig. 1], comprising:

a bus [CPU bus 137 in fig. 5];

a first processor [CPU 24, 124: paragraphs 0093, 0098] that manages, as a file, data recorded in the disk storage device;

a receiver [e.g., tuner 11 in fig. 1] that receives externally supplied streaming data; and

a second processor [controller 25, 125] that executes, based on a disk access request input [paragraph 0079] from the first processor, a write process to write [paragraph 0095] data and file management information input via the bus into the disk storage device, and a read-out process to read out data constituting a file [paragraph 0098], which is stored in the disk storage device, onto the bus, the second processor including first interface unit [ATAPI interface 27] electrically connected to the disk storage device, and a second interface unit [e.g., stream input interface 125g in fig. 5] electrically connected the receiver, and the second processor writing, when a disk

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access request from the first processor instructs writing [paragraph 0079] the streaming data into the disk storage device, the streaming data input from the receiver to the second interface unit via the bus into the disk storage device via the first interface unit. And Higashida et al teach an information processing apparatus having a first processor [CPU 11: col. 5, lines 45-60] that manages, as a file, data recorded a storage device [hard disk 8 in fig. 2] and a second processor [recording/reproducing control means 7 in fig. 2] storing in the storage device streaming data input [col. 6, lines 34-55] and file management information input [col. 5, lines 54-67] from the first processor, in response to an access request input from the first processor via the first line. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Takahashi and Higashida et al because they both teach a storage device storing a file management information input with streaming data input as a file and the Higashida et al's teaching of the first processor providing a file management information input to be stored in the storage device would increase manageability of a file in addition to the first processor reading/displaying a file management information from the storage device [Takahashi: paragraphs 0096, 0098].

10. As to claim 13, Higashida et al teach the streaming data received by a receiver includes compression-encoded video data [col. 4, lines 19-24], and

the second processor includes:

a third interface that outputs video data to an external video monitor [monitor 4];

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means for decoding [col. 6, lines 34-65] the streaming data received by the receiver, in accordance with a decode request sent from the first processor via a first bus; and

means for outputting [col. 7, lines 52-57] decoded streaming data to the third interface, in accordance with a reproduction request sent from the first processor the first bus.

11. As to claims 17 and 24, Takahashi teaches an information processing apparatus, comprising:

a storage device [HDD 28 in fig. 1];

a first processor [CPU 24, 124: paragraphs 0093, 0098] that manages, as a file, data recorded in the storage device;

a receiver [e.g., tuner 11 in fig. 1] that receives externally supplied streaming data;

a bus [e.g., signal line between encoder 114 and controller 125 in fig. 5] to transfer the streaming data received by the receiver; and

a second processor [controller 25, 125], electrically connected to the bus, adapted to receive the streaming data from the receiver via the bus.

And Higashida et al teach an information processing apparatus having a first processor [CPU 11: col. 5, lines 45-60] that manages, as a file, data recorded a storage device [hard disk 8 in fig. 2] and a second processor [recording/reproducing control means 7 in fig. 2] storing in the storage device streaming data input [col. 6, lines 34-55] and file management information input [col. 5, lines 54-67] received from the first

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processor. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Takahashi and Higashida et al because they both teach a storage device storing a file management information input with streaming data input as a file and the Higashida et al's teaching of the first processor providing a file management information input to be stored in the storage device would increase manageability of a file in addition to the first processor reading/displaying a file management information from the storage device [Takahashi: paragraphs 0096, 0098].

- 12. As to claim 19, Takahashi teaches a second bus [CPU bus 137 in fig. 5] to transfer various data.
- 13. As to claim 20, Takahashi teaches a third bus [e.g., signal line between HDD 128 and controller 125 in fig. 5] electrically interconnecting the storage device to the second processor.

## Allowable Subject Matter

- 14. Claims 4, 6, 7, 12, 14, and 15 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
- 15. Claim 21 is allowed.

#### Conclusion

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ilwoo Park whose telephone number is (571) 272-4155. The examiner can normally be reached on Monday through Friday from 9:00 AM to 5:30

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PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey A Gaffin can be reached on (571) 272-4146. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ILWOO PARK PRIMARY EXAMINER

Ilwoo Park

April 11, 2005